## In the Claims:

Please cancel claim 3 and amend the following claims:

(Twice Amended) A method of improving an array of porous polymer pads used in binding assays, said improvement comprising:

- a. providing said array of porous polymer pads on the surface of a solid support; wherein said porous polymer pads are functionalized;
- b. binding a specific substance to each of said porous polymer pads;
- c. freezing said array of porous polymer pads on said solid support; and,
- d. drying said array of porous polymer pads on said solid support at reduced pressure;

wherein, said freeze-drying increases the pore size of said porous polymer pads.

2. (Twice Amended) An array of freeze-dried porous polymer pads on a solid support, comprising a specific substance bound to each of the porous polymer pads prepared using the steps of claim 1.

(Amended) The array of claim 2 wherein said specific substance is a probe.

(Amended) A method for increasing the pore size of the porous polymer pads in an array used in binding assays, said method comprising:

- a. providing said array of porous polymer pads on the surface of a solid support;
  wherein, said porous polymer pads are functionalized;
- b. covalently binding a specific substance to said array of porous polymer pads;
- c. freezing said array of porous polymer pads on said surface; and,
- d. drying said array of porous polymer pads on said surface at reduced pressure.

6. (Amended) The method of claim 5 wherein said freezing is at liquid nitrogen temperatures and said drying is by sublimation.

(New) The array of claim 4 wherein said probe is a polynucleotide.